From:	Ann Redmond
Sent:	Monday, February 23, 1998 8:46 PM
To:	Scott Fallon; Greg Shaw (Corp. PR); Kumar Mehta
Cc:	Mich Mathews; Vivek Varma (LCA); Tod Nielsen
Subject:	RE: Browser in the OS

Yep, I agree with everything you have said. I am only trying to point out the potential weaknesses so we are prepared to defend the data.

As I said, I think overall it is fine and you should use it—it is powerful at proving the strength of our rationale.

-----Original Message-----
From: Scott Fallon
Sent: Monday, February 23, 1998 3:49 PM
To: Ann Redmond; Greg Shaw (Corp. PR); Kumar Mehta
Cc: Mich Mathews; Vivek Varma (LCA); Tod Nielsen
Subject: RE: Browser in the OS

That was the entire point, actually - to be able to say that when we point out our rationale, ISVs are then overwhelmingly in favor of us doing this. We weren't trying to get an unaided response. We want to make the distinct point that our rationale hasn't been fairly represented in "conventional wisdom" but when it is presented, ISVs understand it and agree with it.

As to the conflicting data below, that is actually very different data. That asks if the DOJ should be pursuing us (which we don't ask at all - some may think integration is good but denied by the consent decree, or they may think it good but just hate us) and it asks if IE is a separate app. Many who think it should be integrated (for the reasons in our rationale) may think it a separate app today (because they don't view it as integrated yet, etc.). But that has no bearing on the question of WHETHER it should be integrated. Lastly, what type of developer did you speak with? We're talking ONLY ISVs in our survey - not corporate developers who will have far less ability to understand the value here in us doing this.

All that said, is it fair to say we have a defensible survey that 1) Says ISVs when presented with our rationale for integration believe it to be good for them and the industry and 2) Is a survey that makes no pretenses about showing anything but that - specifically, that when ISVs are told our rationale for integration, they believe it is good for all?

-Scott

-----Original Message-----
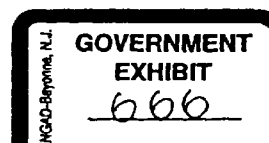| From:	Ann Redmond
Sent:	Monday, February 23, 1998 3:37 PM
To:	Scott Fallon; Greg Shaw (Corp. PR); Kumar Mehta
Cc:	Mich Mathews; Vivek Varma (LCA)
Subject:	RE: Browser in the OS

Overall it looks fine and could be quoted in our favor on the issue, however...

- I wouldn't refer to it as unbiased, and wouldn't refer to it as an opinion poll. An unbiased question would have been more along the lines of: *Based on what you know or experience today, would you agree or disagree that a browser integrated into the OS is beneficial to your business (or SW vendor community or users).* I would have then proceeded to state our case and rationale for the browser's integration and the value to the developer and user and see if that improves their agree/disagree on the same question. You could have captured better understanding of what information you were providing (various standard services of browser integration) that shifts their agreement in our favor. What you have now is their response to our rationale. Not entirely unbiased. It is also a complicated and long question which can distort response—I would avoid releasing the Q. to the press.

- We have some conflicting data from developers. In our current developer messaging study (still fielding but I pulled a sample of 100) we have developers responding in a way that somewhat contradicts your findings.
  When ask this question: *The DOJ is taking legal action against MS for alleged anti-trust violations for ignoring a 1995 consent decree that forbids MS from conditioning the sale of one product to another. The DOJ believes MS has violated this decree by including its internet browser SW as part of its Win95 SW that is the OS for most PC's. Do you agree or disagree that the DOJ should be pursuing legal action against MS over this?*
    44% agree
    41% disagree
    15% don't know

  We also asked: *Do you consider MS IE an integral part of the operating system or do you consider it a separate application?*
    27% Integral Part

57% Separate Application
16% Don't know

So this leads me to believe it is our stated rationale, and not their knowledge or experience that drives their favorable response. Not a bad thing, we should just be aware of how to defend the numbers.

——Original Message——
From: **Scott Fallon**
Sent: Sunday, February 22, 1998 8:59 AM
To: Greg Shaw (Corp. PR); Ann Redmond; Kumar Mehta
Subject: FW: Browser in the OS

Ann: Greg would like you to take a look at this survey we completed and let us know if it's defensible. Kumar was the research expert for us on this one so you can direct any research-specific questions to him. I can talk about the sample drawn from. Here's the survey and the results. You can check out methodology, etc. in the thread below.

-Scott

<< File: browser integration survey4.doc >> << Message: Survey results - N=200-SEE ACTION ITEM AT BOTTOM >>

——Original Message——
From: Greg Shaw (Corp. PR)
Sent: Saturday, February 21, 1998 5:47 PM
To: Scott Fallon; Tod Nielsen; Vivek Varma (LCA); Mark Murray
Cc: Mich Mathews; Mary Meagher (General Employment); David Heiner (LCA); Tonya Dressel
Subject: RE: Browser in the OS

We released the Hart Teeter poll and avoided any criticism, even though it was funded by us, by making the questionnaire and results public and having the pollsters defend it. The questionnaire was worded fairly and the sample was sufficient to avoid criticism from third party pollsters. If we're going to make it public you need to send it to Ann and make sure she agrees its defensible

    ——Original Message——
    From: Scott Fallon
    Sent: Saturday, February 21, 1998 4:35 PM
    To: Greg Shaw (Corp. PR); Tod Nielsen; Vivek Varma (LCA); Mark Murray
    Cc: Mich Mathews; Mary Meagher (General Employment); David Heiner (LCA); Tonya Dressel
    Subject: RE: Browser in the OS

    Tod's interested in using it next week in Europe where he's on press tour, too. Yes? No? I can forward Ann results and the survey if we decide to take that next step. The concerns would be: 1) We funded it (independent of how solid the methodology is detractors will say, "Of course they got good results - they funded it. Duh.") and 2) We explained why we think integration is good but didn't give the counter opinion of why others think it's bad (but that's pretty common knowledge plus the point was to show that when we explain why we're doing this, ISVs realize this is a good thing for them).

    -Scott

        ——Original Message——
        From: Greg Shaw (Corp. PR)
        Sent: Saturday, February 21, 1998 3:07 PM
        To: Scott Fallon; Tod Nielsen; Vivek Varma (LCA); Mark Murray
        Cc: Mich Mathews; Mary Meagher (General Employment); David Heiner (LCA); Tonya Dressel
        Subject: RE: Browser in the OS

        We should consider how to make this public. I'd like to forward this on to Ann Redmond to review to see if there are any issues she forsees with methodology in making this public.

        To make it public, we need to release the survey questionnaire and results. I'm not saying we will release it but we should consider it

            ——Original Message——
            From: Scott Fallon
            Sent: Saturday, February 21, 1998 11:20 AM
            To: Tod Nielsen; Greg Shaw (Corp. PR); Vivek Varma (LCA); Mark Murray
            Cc: Mich Mathews; Mary Meagher (General Employment); David Heiner (LCA); Tonya Dressel
            Subject: RE: Browser in the OS

        ATTORNEY-CLIENT PRIVILEGE

        (David: You're on here because it occured to me this is a communication we want privileged)

        Here's the survey results.

        Topline

A survey of 200 ISVs (Independent Software Vendors - packaged software companies) was made. drawn randomly from a base of 4,000 ISVs. A third party market research firm (TRG in Los Angeles) conducted the survey and selected the random sample. ISVs were first read a description of Microsoft's rationale for integrating browser technology into Windows then asked their opinion.

- **85% said this integration will have a positive impact on their company**
- 83% said there will be positive impacts for end users
- 80% said there will be positive impacts for the software industry as a whole
- 79% said it will be easier to create new applications and bring new capabilities to their customers as a result of the integration

Other supportive results
The survey showed that not only does the software industry believe this integration will improve business, but business is booming already:
- 86% of ISVs surveyed said sales are increasing; only 2% say sales are declining

The Internet is another area where opportunities exist for all companies, not just a few:
- 93% of ISVs surveyed said the Internet is having a postive impact on their company

And the Windows platform stands out as an equally strong source of opportunity:
- 91% of ISVs surveyed said Windows has had a positive impact on their business (which makes a nice closed loop with the first point..."and that business is booming!")

Windows is, in fact, an engine for job creation:
- 30% of ISVs surveyed said their company's very *first* application was on Windows - so Microsoft innovation in operating systems created the opportunity for almost a third of the ISVs to start their business.

A conclusion can be drawn that Windows and innovations Microsoft has integrated into Windows have made it easier for ISVs to write applications that deliver more value to end users and that the Internet is a key component of continuing this trend, so that if Microsoft were to not integrate browser technologies into Windows, ISVs would suffer, end users would suffer and business success would suffer across the industry. When Microsoft's rationale for integrating is explained to them, ISVs understand this and want the integration to move forward unimpeded.

Survey
At a sample size of n=200 and with the 85/15 split in the responses to the relevant questions, the sampling error is +/- 4.9%. Here's the actual survey used. Here's the text that was read to the surveyed ISVs before they were asked whether they felt the integration was good:

<<One of the reasons Microsoft cites for integrating browsing technology into the OS is the benefits to Independent software vendors from having a larger standard set of system services included in the OS, just as when other network protocols such as TCPIP (read "T-C-P-I-P") were integrated into Windows. In the case of integrated browser technologies, ISV's could develop applications knowing there was one standard set of user services that was on their machine. ISV's would not have to worry about whether a browser was present, or about inconsistency in user's installed software. For example, ISV's can ship help files as standard HTML (read "H-T-M-L") files, knowing browser technology is there in the OS, thus eliminating the need for proprietary help formats and tools. This integration allows ISV's to use standard protocols in their applications including HTML, FTP ("F-T-P") and Gopher to retrieve data from the Internet or other sources. Other new built in services would resolve URL addresses that are passed into an application or give you the ability to retrieve URL's and bring the data into your application. These are just some of the examples of the new standard services added with browser integration. >>

<< File: browser integration survey4.doc >>

Methodology and Sample Discussion
An outside market research company (TRG in Los Angeles) was contracted. Contact at the company, who is willing to discuss publicly the validity of the results is John Ruchinskas 310-839-3412. Microsoft provided TRG with names and phone numbers for every member of the MSDN ISV Program. This program is a free program with 4,000 ISV members. It is the base ISV program at Microsoft and does not discriminate on any level aside from requiring that ISVs be running on or supporting at least one Microsoft platform technology (so, for example, any ISV with an application running on Windows is admitted). As a result, and by virtue of the fact that Windows is the ubiquitous platform on PCs, this is the broadest possible set of PC ISVs (the flippant way to defend the sample set is to point out that since we surveyed PC ISVs of course they will be Windows ISVs because isn't that the whole issue here - that they are all Windows ISVs). We have competitors from Netscape to IBM to Lotus in the program. We have over 300 ISVs doing Java work, including many of the 100% Pure Java camp ISVs. This is not a "friends" program skewed to supporters - we have so many ISVs because even ISVs who compete with us or dislike us are in so they can get the basic Windows marketing and technical information.

Microsoft had no hand in selecting the random set of surveyed ISVs from this list of 4,000. TRG did that in a random fashion.

Non-survey Generated Supportive Data

The survey did not take any comments from respondents but in case we want to illustrate the support of ISVs for this integration with some examples, here are some quotes we've received from a few ISVs on this topic (and more are always only a phone call away):

- **Enrique Salem, CTO, Symantec**: "IE integration with Windows and the Internet enabling of Windows is clearly beneficial to customers. It allows for the development of better applications and increases user productivity."
- **Mike Devlin, President, Rational Software**: "Microsoft's ability to provide a complete, well-tested, common platform, has radically changed software ecomonics for Rational and for our customers (primarily high-end companies such as Ericsson, Nortel, Motorola, Raytheon, Fidelity, Aetna, MetLife, Smith Barney, Deutsche Bank, GE Capital, etc.). Until recently Rational was primarily in the Unix market. Unix is supposedly an open systems environment with common cross-platform technologies (Posix, Motif, NFS, etc.). However, the reality is that the cost of developing products on Unix is much higher than on Windows, since in there are real differences (major, minor, subtle, intentional and unintentional) between platforms. Furthermore the quality and performance of products on Unix is quite low because of platform incompatibilities, the lack of a truly complete environment, and the least-common-denominator effect. Therefore, today we must price our Unix products much higher than the prices for the same product on Windows (typically 2-3 times the price) for what is actually an inferior product on Unix. In spite of the higher prices, our profitability and ROI are much lower on Unix than on Windows. On Windows we can take advantage of the very complete set of high quality, high performance services provided by Microsoft to produce much better products at lower prices. This is good for Rational and for our customers."
- **Robert Wiedeman, President, Template Graphics Software**: "Bundling these services is critical for ISV's to compete and deliver features now required by the marketplace. Users have the expectation that the "net" be as transparent as possible. While 3rd parties could deliver the Internet services we use, they would cost us a license fee, and would not interoperate. Our costs would rise on license fees, support issues and development time."
- **Robert Wiedeman, President, Template Graphics Software**: "TGS is a UNIX and Windows developer. Microsoft has provided excellent support to TGS marketing and development activities. Microsoft has never requested that TGS "not" work on anything UNIX - in fact Microsoft has facilitated TGS activities. On the other hand, TGS has been told by other companies with a vested interest against Microsoft that any products that are not "100% Java" will not get support, marketing, etc."

-Scott

---Original Message---
From: Tod Nielsen
Sent: Wednesday, February 18, 1998 5:01 PM
To: Greg Shaw (Corp. PR); Vivek Varma (LCA); Mark Murray; Scott Fallon
Cc: Mich Mathews
Subject: RE: Browser in the OS

Scott Fallon is driving this for me. We are conducting the necessary surveys/research to get the data we need. Please synch up with Scott so we are all working together on this.

Thanks - Tod

---Original Message---
From: Greg Shaw (Corp. PR)
Sent: Tuesday, February 17, 1998 11:09 PM
To: Vivek Varma (LCA); Mark Murray; Tod Nielsen
Cc: Mich Mathews
Subject: FW: Browser in the OS

I'm not sure who is working on what to respond to some of the good ideas in Nathan's mail. We need to think through and respond collectively on some of these good ideas Nathan has put forward.

Essentially what is being proposed here is that we fan out and poll people in the industry on where or not they agree that the browser is part of the OS. Armed with their responses, we would then produce several deliverables:

- A joint statement (so perhaps we draft a general statement of support and run it by people to see if they will sign it. We would contact, Dertouzos, Bob Metcalfe, Stewart Alsop, Esther Dyson, leaders at ISVs like Ted Johnson, Eubanks, etc. I think if we had 50 for example it would be sizeable and compelling
- We then use that statement for ads in the national papers
- We could as Ann Redmond to survey ISVs with some questions about integration and help us make our point. Then release it to the media.

I am willing to focus on this but would need to do so with someone in DRG.

From: Nathan Myhrvold
Sent: Sunday, February 15, 1998 12:37 PM
To: Bill Gates: Tod Nielsen; Brad Chase; David Cole; Joe Belfiore
Cc: 'Mich Mathews (Cor (michmath)'; 'Greg Shaw (Corp. (gregshaw)'; Tom Pilla; Alison Obnen; Bill Neukom (LCA); David Heiner (LCA); Steve Ballmer; Mich Mathews; Enc Rudder; Yusuf Mehdi, Steve Ballmer; Paul Maritz; Jim Allchin (Exchange)
Subject: RE: Browser in the OS

It is a GREAT idea to get as much quotable data as possible - both for Bill's testimony and for other press work. By "quotable data" I mean:

- Specific people we can quote. Professor Detrouzos of MIT is a GREAT quotable source - he is very hard core on this. Bob Metcalfe, Stewart Alsop, Esther Dyson, Walt Mossberg and others have written in their various magazine columns that they agree the browser should be in the OS - we should look up the references and check them.

- Surveys we can use. This could be an internally done survey, or one done by a polling company.

- Signed statement. I think that we could make a statement and get specific people to sign up to it - including computer science professors, industry figures etc. This includes both people who are already on the record as saying that this is a good idea, as well as other folks. Ideally it includes both supporters (Michael Dell etc.) and impartial observers (Metcalfe, Dyson etc.) and also some competitors (Schmidt would be great, but at least Scott Cook, Gordon Eubanks).

We should get as much as we can get, as soon as we can get it.

As an example, we could get a statement about the technical direction of integration, get some survey results, and then get a statement signed by 100 industry and computer science figures.

If we had that, then I think we should consider running it in full page ads in the WSJ, NYT, Washington Post timed to appear the day AFTER Bill does the testimony.

We should keep this VERY quiet before the testimony because we do not want Barksdale or others preparing a counterattack. Bill should lead with this in his testimony, then we run the big full page ads the next day, and repeat for a couple days.

That is about the method. As to the SUBSTANCE, I think that it is CRUCIAL to make the statement we ask people about in the survey, or the statement we ask them to sign etc. is worded properly.

Saying "put the browser in the OS" is already a statement that is prejudical to us. The name "Browser" suggests a separate thing. I would NOT phrase the survey, or other things only in terms of "put the browser in the OS".

Instead you need to ask a more neutral question about how Internet technology needs to merge with local computing. I have been pretty successful in trying this on various journalists and industry people.

Here is an example:

Basic message

In the early days of personal computing, the data that a person created or interacted with was all local to the machine - it sat there on the hard disk. You would explore or navigate that data by putting "files" into "folders", which were themselves organized hierarchically in "directories". The operating system included programs to deal with these structures for organizing local data.

In order to look at the files you had to use a variety of different programs. Many incompatible and proprietary file formats evolved, and each required different programs to open at look at them, and had different ways of being organized.

Along came the Internet. When a user connects to the Internet they are suddenly in contact with millions of sites all over the world. Those sites are organized using a different metaphor than local files. Instead of being in folders and directories and so forth, you get to them by clicking on links. The links are embedded in a universal data format called HTML.

Why have two different ways to look at and organize data? The simplest thing for users is to have one metaphor - which means that the system of folders, directories and files has to be updated. The programs that let you deal with folders, directories and files in the old PC way

has to be updated to use links the way the Internet does. and be able to display HTML

Local data and remote data should be treated on an equal basis. Users should not have to learn one metaphor for the Internet and a different one for their own files. The whole point of the Internet is abstracting away geography. You can bounce from one link to another, unaware of the continents you are crossing. Why should your own hard disk be the one exception?

Once you take this point of view, there are many opportunities to make Internet computing and local computing converge. Many of the data files on the local hard disk can migrate to HTML so that they can be viewed with the same universal data format. Local folders and directories can become pages. Even the background picture for the system can become an active web page, a stock market ticker or a series of news flashes.

Responses given if pressed

Microsoft has a vision to integrate local computing with Internet computing. This means building the fundamental Internet protocols into the operating system.

Netscape is on a different strategy. They are NOT attempting to make local data, or local PC computing mesh smoothly with the Internet. Instead, their strategy is to replace local computing by integrating more and more funcitonality into their software. They are creating new APIs to turn their browser into a high level operating system, which will obviate use of a local operating system, like Windows. They feel that the Browser is the platform.

This boils down to a fundamentally different view of the technology. The competition between Microsoft and Netscape isn't just about one company versus another - we have each made very different technical bets.

Microsoft is telling its millions of existing users that there is a path for them to use the Internet metaphor both locally and remotely. Netscape is telling people to put with the difference between their local PC and the INternet, and that over time you will throw out your old software in favor of new software and services which operate on top of the Netscape platform.

Microsoft wants to optimize the Windows platform for the Internet. Netscape wants people to forget about local platforms altogether and only consider Netscape itself as the platform.

This is a case of different technical visions competing in the marketplace. We think our vision is clearly better for users than the Netscape approach. Reviewers and industry experts who have taken a look at IE 4.0 have agreed with us, but ultimately it is the customer who will decide.

Nathan

Some part of this debate relates to the issue of whether the browser is a logical extension of the operating system.

When I explain to people what we are doing with help - moving away from a proprietary format with special tools to HTML and how that hleps users people start to understand. When I explain about bowsing information locally and remotely people understand. When I talk about letting ISVs call our html for LOCAL and remote display as well as link resolution etc... people start to understand. I also think we need to talk about our use of HTML for forms. Only by doing a document that EXPLAINS why we are putting the browser into the operating system will people start to have more sympathy for why this makes sense and understand that the government shouldn't be blocking this.

Right now people think the ONLY reason we are putting the browser into the OS is to gain share which just is not true - we didn't get share from IE 1 in the OS or IE 2. IE 3 got us share before it was in the OS because it was a strong product.

I think we need to do a piece on WHY we are putting the browser into the operating system

and our future plans. I think we need to make that document widely known

I want to get Eric Schmidt in particular to comment on whether he thinks it makes sense or not. I wonder who really thinks browsers don't belong in the OS. Detrouzos of MIT told me how he had been saying this before Netscape was founded and even said so in some speeches.

More important I want to get a survey done where ISVs declare whether they think having the browser in the operating system the way we are planning to do it makes sense and is good. We might want to do some users as well.

We have never put crazy stuff into the OS and its time for people to know we are doing this for developers and customers.

It would HELP ME IMMENSLY to have a survey showing that 90% of developers believe that putting the browser into the OS makes sense. I am sure we will get like 60% before we explain our plans. Once we explain our plans properly I think we will get more like 90%.

Even that insane SPA document didn't try to suggest that browsers don't belong in the OS.

Ideally we would have a survey like this done before I appear at the Senate on March 3rd.

I think David should have someone take a shot at writing up our plans for the browser in the OS and Brad/Tod should figure out how to get that distributed and do some kind of survey.